



WEEKLY EDITION  
OF THE  
**AMERICAN BEE JOURNAL**

THOMAS G. NEWMAN,  
EDITOR.

Vol. XXI. Dec. 16, 1885. No. 50.

#### APICULTURAL NEWS ITEMS.

##### EDITORIAL AND SELECTED.

**Stop and think before you speak ;**  
It is best, you know.

Haste makes waste, the wrong are weak—  
Learn to travel slow.  
Do not let a word go forth  
From your lips so strong.  
That could count of little worth,  
Or commit a wrong.

**A Pleasant Re-UnIon** occurred at Detroit last week. Many of the prominent apiarists of North America were present, and we think there never was a more enthusiastic gathering of bee-keepers in America. Had the banquet been added, it would have very much resembled the European gatherings.

**Mr. Geo. E. Hilton**, of Fremont, Mich., has sent us a large photograph of his apiary, which is now placed on the wall of the office of the BEE JOURNAL with many others.

**Mrs. L. Harrison**, of Peoria, Ills., the most prominent lady-bee-keeper of America, with some 13 other lady apiarists, were present at the Detroit Convention last week. Mrs. Harrison was elected as the Vice-President for Illinois.

**Mr. H. Chapman**, of Versailles, N. Y., exhibited seeds of a new honey-plant, at the Detroit Convention, and passed around some of the honey to be tasted. Prof. A. J. Cook took some of the seed home with him in order to ascertain its name. Mr. Chapman says that it blossoms after basswood bloom is gone, and that he will plant 5 acres next spring on land worth \$100 per acre, and he believes it will pay.

**Hon. Edwin Willets**, President of the Michigan Agricultural College, who gave the "Address of Welcome" at the Detroit Convention, was the one who so nobly aided Prof. Cook in his mission to Washington, as a committee from the North American Bee-Keepers' Society several years ago, to get the ruling of the Postmaster General reversed, in order to allow queen-bees to be transported in the mails of the United States. He is a firm friend of apiarists. His address of welcome at the Detroit Convention, will be read with pleasure. See page 790.

The Bee-Pasturage address which was given at the Detroit Convention by the Editor of the AMERICAN BEE JOURNAL, was thus commented upon by a reporter for the Detroit Tribune :

The delights of being a bee-maid or a poetical-appearing youth, and driving the festive bee to and from the pasture each day, were strongly set forth. Enclosed in a suit of boiler-iron it would indeed be delightful to drive the tender-eyed Jersey-bee to its cell each night.

That reporter seemed to have a vein of fun. But that is not strange when it is known that the Convention quite often indulged in roars of laughter, and prolonged applause over some *stinging* remark or *sharp-pointed* reply. Mr. J. B. Hall "carried off the laurels" in that department. His good-natured, but *stinging* criticisms were sometimes received with such uproarious merriment as to be heard on the street from the third floor of the building.

**Fire Destroyed** 200 colonies of bees, at New Madrid, Mo., on Dec. 6, 1885. They belonged to Flanagan & Illinski, of Belleville, Ills. They have sent us the following statement of the disaster, which their friends will be very sorry to learn :

We have had a large number of colonies of bees in Arkansas, Lee Co., Mo., for a number of years, but the locality proving to be a poor one, we decided to move them to a much better location, and had them thus far on the route in good order. We had landed them from the boat last evening, and was waiting for the cars to take them to the interior of the State, where we have another apiary in a fine location. When the steamer, "City of Bayou Sara," landed and began discharging her freight, in a moment she was enveloped in flames, and our bees being right at the landing, nearly all of them perished. Only some 80 or 90 colonies were saved out of nearly 300 strong ones, all in double-story Simplicity hives, with frames of comb for extracting.

**Insect Wax of China.**—Mr. Wm. Muth-Rasmussen, of Independence, Calif., has sent us the following item, which has been going the rounds of the press :

The British Consular Agent at Chung-King, Mr. Hosie, has made a tour through certain districts of China for the purpose of gaining information concerning insect white wax. He has found the substance to be the product of minute, brown, lice-like insects, which exist, together with a small black beetle, in excrescences or galls attached to the boughs and twigs of an evergreen, called by the Chinese "the insect tree." Early in May these galls are collected and placed on the wax-tree—usually a stump from which rises numerous sprouts. The creatures soon deposit a white coating on the boughs and twigs, which often reaches a thickness of a quarter of an inch in ninety or a hundred days. The branches are then lopped off, and the wax is carefully removed by scraping and boiling. The material is then poured into moulds, and becomes the white wax of commerce, used chiefly for candles.

Mr. Muth-Rasmussen remarks as follows : "As wax is becoming more scarce through the use of the honey-extractor and its increasing consumption for comb-foundation, it is well that its place in other industries can be supplied from other sources, perhaps, as in this case, equally good ; for according to the description, I judge this 'insect-wax' to be almost identical with beeswax." Whatever it may be, if its use for other purposes will relieve the market, it will be well, for bee-keepers themselves are now extensive consumers of wax, and the productions of it is much lessened by the modern management of the apiary.

**Two More Numbers** will complete the AMERICAN BEE JOURNAL for 1885. Now is the time to renew subscriptions, and send an extra name or two with your own and secure a premium. We have some colored Posters, which we will send FREE, to put up in conspicuous places. We will with pleasure send sample copies to any one who will try to get up a club.

**The Essays and Addresses** at the Detroit Convention are generally published in full in the Report as given this week. Only very short digests of two of them are given, but they will be published in subsequent numbers of the BEE JOURNAL. We have given all that our space would permit in this issue, even to the exclusion of other matter of general interest, knowing full well that all our readers are anxious to read what was said and done at that very interesting meeting.

**New York Apiarists** in large numbers were at the Detroit Convention, and they were "a jolly lot" too. President L. C. Root won golden opinions as a "model presiding officer." Canada and Michigan were also well represented by successful apiarists, who were also well informed and fully able to discuss the difficult problems of our pursuit. We point with pride to the printed list of members on page 790, as containing some of the best apiarists of America. There were 10 States and Provinces represented, viz : New York, Massachusetts, Connecticut, Ohio, Canada, Illinois, Pennsylvania, Iowa, Missouri and Michigan. The members were principally in the prime of life, with some older and younger. All were enthusiastic, and it was a happy re-union.

**Many Thanks** are due to our friends for sending us so many *new* subscribers, when renewing their own subscriptions. The reduced price for 1886 has caused quite a "boom," and is a *popular* move in every sense of that word. As we do not wish any one to work for nothing, we have concluded to offer premiums for *new* subscribers for 1886, for in order to compensate for the reduction of our price to \$1.00, we should at least *thribble* our present subscription list.

For 1 *new* subscriber for a year (besides your own renewal) we will *present* you either of the following books—25 cents each.  
For 2 *new* subscribers—any 2 of the books.  
For 3 *new* subscribers—all 3 of them; or the Western World Guide & Hand-book.  
For 4 *new* subscribers—Bees and Honey, (\$1).  
Gaskell's Hand-book of Useful Information—a very handy book of 64 pages.  
Architecture Simplified; or, How to Build a Dwelling-house, Barn, etc., giving plans, specifications and cost—60 pages.  
Look Within for 5,000 facts which every one wants to know—75 pages.

**When Renewing** your subscription please try to get your neighbor who keeps bees to join with you in taking the BEE JOURNAL. It is now so *cheap* that no one can afford to do without it. We will present a **Binder** for the BEE JOURNAL to any one sending us four subscriptions—with \$4.00—direct to this office. It **will pay** any one to devote a few hours, to get subscribers.

**Christmas Numbers** are on our desk of Frank Leslie's Illustrated News, the Graphic, of Cincinnati, O., the New York Agriculturist, Vick's Monthly, etc. All of them are elegant and well worthy of patronage.

WITH

REPLIES by Prominent Apiarists.

## Moving an Apiary.

**Query, No. 170.**—What is the best and safest method of moving an apiary about 50 yards, the colonies having been for years, summer and winter, on the same stands, in chaff hives?—TITUSVILLE, PA.

I would refer the querist to page 105, of the BEE JOURNAL for 1884.—JAMES HEDDON.

Move the bees after they have ceased flying this fall, and do it carefully.—W. Z. HUTCHINSON.

I should move them as soon as winter set in in earnest, and at the first flight in the spring they will mark their new location so no loss will occur.—G. M. DOOLITTLE.

I have had no direct experience in this, but I think I should try moving them quietly after they have settled down for winter; then put boards in front of the entrances, and change everything as much as possible in the appearance of the old location.—C. C. MILLER.

Move them in the spring after there is no longer any danger of "spring dwindling;" or, if wintered in-doors, move them when taking them out of winter quarters. Shade the entrances with boards, so they will notice that the location is not the same.—DADANT & SON.

If moved at night-fall, the hives turned facing in an opposite direction, and a board placed slanting against each hive over the entrance, they can often be moved at once with no trouble. In some cases the bees will go back, but these can be caught in a box and again at night-fall returned to the hive, when usually they will remain.—A. J. COOK.

I think that there would be a loss of bees by any plan except by moving them a few feet every day that they can fly. If to be moved at once where wanted, the least loss and the best plan would be to wait until towards spring, and then move them on the first day they can have a flight after a confinement of several weeks.—G. L. TINKER.

The fact that the bees have been on the same stands for a longer or shorter period makes no difference in the proposition. I would say that the safest plan would be to move them all about 3 miles from the present location; leave them till young bees are flying freely in the spring, and then replace them where you desire to have them remain permanently.—J. E. POND, JR.

I have moved my apiary of nearly 100 colonies 3 times in the past 4 years, and every time without loss.

Move them in the early spring, and all in one day. Close up the hives in the morning, and carry them to their new location, and keep the hives all closed till late in the evening. In the meantime clear up the old yard and change its general appearance all you can. Lean up in front of the hives some boards, or pile some brush in front of them. Now the first warm day the bees fly freely, will be the trying time. If they return to the old yard in great numbers, keep a lot of smothered fires going till the trouble is over. You may have to look after them for 2 or 3 days.—G. W. DEMAREE.

## Albinos and Italians.

**Query, No. 171.**—In the answers to Query, No. 159, the prevailing opinion seems to be that both dark Italians and hybrids excel light Italians as honey-gatherers. How do the Albinos compare with light Italians as honey-gatherers? Are they as gentle and prolific?—LEWIS.

I have had no experience with the Albinos, but I believe that they are no better than the light Italians.—G. M. DOOLITTLE.

I tried the Albinos only one year. They were very handsome and very gentle, but were not up to the standard for business. I thought that with the yellow Italians they had the beauty and amiability at the expense of business. Possibly I judged too hastily.—A. J. COOK.

Albinos are pure, light-colored Italians, and nothing more nor less. The term "Albino" is a misnomer as applied to the bees so-called, and can only be accepted as an approximation. I have found that light-colored bees work just as well as any others. I have also found poor workers of all shades of color, and poor hybrids in many instances. The yellow strains are ordinarily more gentle than the darker, and therefore, as a rule, more to be preferred.—J. E. POND, JR.

If you will rear Italian queens extensively, and advertise them for sale, you will find out what the prevailing opinion is on this subject. About one purchaser in ten will take your dark Italians off your hands, and the hybrids—you will find them like the old preacher's "coon skin," you "cannot sell, give away or lose them." I have tried the Albinos, and they are as good as the best Italians. They are simply a strain of the Italian race.—G. W. DEMAREE.

I can speak only for the Syriaco-Albinos. The queens of this strain, as a rule, are more prolific than the Italians; they also average a little larger in size, some of the best measuring a full inch in length when laying. The workers are very gentle—some of the best marked white bees being remarkably so. Smoke is unnecessary in handling them. As honey-gatherers they are fully equal to the best strains of the Italians.—G. L. TINKER.

## Candy for Bees in Winter.

**Query, No. 172.**—Can bees be wintered successfully on candy composed of basswood honey and granulated sugar, and made to the required thickness? I have a couple of choice Italian colonies which I desire to feed.—J. G., Wisconsin.

We would prefer syrup instead of candy.—DADANT & SON.

I think without doubt they could, though I have never tried it.—A. J. COOK.

A trial will tell you. I should use powdered sugar instead of granulated, as much of the granulated is often wasted by falling to the bottom of the hive.—G. M. DOOLITTLE.

I have never wintered bees on candy, but others have done so successfully. If colonies need feeding now, that is what I would advise.—W. Z. HUTCHINSON.

Yes, in my locality; but they must be looked after in the early spring, as colonies fed on candy are likely to "swarm out" if the candy becomes dry and hard.—G. W. DEMAREE.

I have experimented but little in this direction. I think that they could, but I should much prefer clear sugar syrup, fed into the combs in proper season.—JAMES HEDDON.

Yes; that is to say, no one can assert positively as yet, that any given colony will winter safely, but so far as the mere matter of food is concerned, this inquired about is as safe as any other.—J. E. POND, JR.

In feeding back a lot of extracted honey, three years ago, to get partly filled sections completed, I found subsequently that all the honey in the sections and brood-combs had become candied solid, and as hard as the "Good candy" can be made. As the bees wintered well on the candied combs, I think they would winter equally well on the candy, if they can have space enough to cluster.—G. L. TINKER.

## Local Convention Directory.

	Time and place of Meeting.
Jan. 12.	Cortland Union, at Cortland, N. Y. W. H. Beach, Sec., Cortland, N. Y.
Jan. 19.	N. W. Ills. & S. W. Wis., at Freeport, Ills. Jonathan Stewart, Sec., Rock City, Ills.
Jan. 19-21.	Maine, at Skowhegan, Me. Wm. Hoyt, Sec., Ripley, Me.
Jan. 20, 21.	Indiana State, at Indianapolis, Ind. F. L. Dougherty, Sec., Indianapolis, Ind.
Jan. 21.	Champlain Valley, at Middlebury, Vt. R. H. Holmes, Sec., Shoreham, Vt.
Apr. 27.	Des Moines County, at Burlington, Iowa. Jno. Nau, Sec., Middletown, Iowa.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

Preserve your papers for reference. If you have no BINDER we will mail you one for 75 cents, or you can have one FREE if you will send us 4 new yearly subscriptions for the BEE JOURNAL.

## North American Bee-Keepers' Society.

The Sixteenth Annual Convention of the North American Bee-Keepers' Society met at Detroit, Mich., on Tuesday, Dec. 8, at 10 a.m., President L. C. Root in the chair. Quite a large number of bee-keepers were present from 10 States and Canada; all were very enthusiastic, and as "sweet as honey."

After an impressive invocation by the Rev. L. L. Langstroth, the Secretary called the roll of members for last year. Those present paid their dues and received their badges, among them being six ex-presidents of the Society.

The Treasurer reported \$48.90 in the treasury. It was voted to omit the reading of the minutes of the last meeting, as they had been published in all the bee-papers, and it was not necessary to lose time in reading them.

Mr. A. F. Manum, Vice-President for Vermont, reported the honey crop of that State, for the present season, to be 160 tons.

Mr. Wm. G. Gibbons, Vice-President for Delaware, in his report, says: The year 1885 has been an exceedingly unpropitious one for bee-keepers in this part of the country. The warm weather which usually sets in by April 10, was procrastinated until near the beginning of May, and during both April and May cold rain-storms were frequent. The result was that the bees got to work 15 days later than usual. The white clover, which is in this section the best and almost only bee-pasturage, did not seem to be well supplied with nectar, and the season of its bloom was exceptionally short; consequently the colonies gathered a very small supply of surplus honey, and few swarms issued. Generally the colonies are in good condition for entering upon the coming winter, and seem to be healthy.

Mr. Arthur Todd, Vice-President for Pennsylvania, made the following report for the year 1885:

The winter of 1884-85 proved disastrous to many bee-keepers in the State of Pennsylvania, and as regards a honey harvest—practically there was none. The fall crop of honey has likewise been a complete failure, and bees go into winter quarters in bad condition, unless fed on sugar syrup. I have taken pains during my business journeys, and in my correspondence, to learn the actual results of bee-keeping this year in this State for many a mile distant from Philadelphia, and I think that the word "disastrous" will best express the general feeling as to the results.

I regret that I am unable to meet the brethren in convention assembled; it is a great disappointment to me.

Mr. H. F. Hunt, Vice-President for Quebec, Canada, reported as follows: The knowledge of bee-culture, by the improved methods of manipulation, is still in its extreme infancy in Quebec, and has only within the past few years begun to be disseminated among the people, the southern and southwestern parts having more bee-keepers than the other parts. There are numerous box-hive bee-keepers throughout the country, who still take their honey by the old-fashioned method of "brimstoning"—a method which I hope is now on its "last legs." My report, therefore, will not bear comparison with that of our sister Province—Ontario—but I hope that in the not far distant future, we shall be able to make as good a showing. The success attending the labors of bee-keepers in Ontario, will act as a stimulus to those in Quebec.

In common with the rest of the North American Continent, the losses last winter were heavy, but bee-keepers, as a rule, have not been much discouraged, and are hoping for better success this winter. Our losses were not so heavy as those farther south, which I attribute to our being compelled to protect the bees well, on account of the severe cold which once or twice every winter touches 30° below zero, the average being 5° to 10° above.

I have not received as many responses as I could wish, to my request for reports, but I generalize from what I did receive. The past season has been a very poor one indeed, owing to the extraordinary cold season, which seriously curtailed brood-rearing and the secretion of nectar, in some parts of the Province, notably in the vicinity of Lake Megantic, and in the county of Beance. The spring was so dry that certain crops had to be replanted, and would, no doubt, have acted unfavorably to the secretion of nectar in the white clover. Some honey was gathered from basswood, which yields more freely to the south than to the north of the St. Lawrence. Fall flowers also have not given much, and many colonies have had to be fed for winter.

Mr. S. T. Pettit, Vice-President for Ontario, Canada, made the following report:

Bee-keeping in Ontario, for the last year, has not been of the most flattering kind. During the last winter and spring about 75 per cent. of our bees perished. This great loss was brought about by three principal factors, viz.: poor stores, long-continued cold in both winter and spring, and inexperience.

Generally speaking, those of long experience in apiculture, who have given much time, study, painstaking, and exacting care—in a word, those who make bee-keeping a specialty, and who are adapted to the business, sustained comparatively little loss; hence it is plain that this great loss fell principally upon those who, as a rule, neglected some other business to enjoy an immense amount of pleasure and grow suddenly rich by "keeping bees." The large amount of dead, filthy honey thrown upon the market

the past spring, has done no little harm to the pursuit. Interested parties are constantly promulgating the idea that everybody should keep bees, which results in no inconsiderable loss to the country.

Beside the indirect loss by diverting the minds of many from their legitimate calling, I believe a fair calculation would show the startling fact that every pound of honey produced in Ontario, for the last 6 years, has cost the producers, on an average, not less than 25 cents per pound.

The teaching that everybody should do everything for himself, is a retrograde movement, undermining the best manufacturing, producing, carrying and commercial interests, and tends to semi-barbarism; no matter how persistently or plausibly put, "the trail of the serpent is over it all;" "every man to his trade" is a noble motto, and brings "the greatest possible good to the greatest possible number."

The season was a poor one; the amount of honey taken being about 50 per cent. below the average. The weather was too cold and wet with occasional hot spells. The principal honey-producing flowers were abundant, but the elements failed to get into the proper humor to inspire them with their natural love for the secretion of the delicate, sparkling sweets, and the friendly visits of the honey-bee. In spite of all this, some of the short crop of 1884 is yet on the markets; but we will have a clean market for 1885.

There are several practices that militate against the true progress of apiculture in Ontario, besides those already referred to:

1. Extracting green or unripe honey. It is impossible by human art or skill to impart that exquisitely fine, finished flavor that the bees give it when left with them until it is capped.

2. The practice of feeding sugar either for stimulating or wintering purposes. It is very difficult to disabuse the public mind. They know that we feed sugar, and they seem determined to cherish the belief that in some way or other it gets into the honey. If we all fed honey instead of sugar, a less quantity would be thrown upon the markets, and a correspondingly higher price would be obtained, besides inspiring confidence in the purity of our honey.

3. Small bee-keepers demoralize our markets sadly, and give a good deal of trouble by allowing their bees to be robbed.

4. And last but not least, I fear the most of us will have to plead guilty to the charge of painting the bright side of bee-keeping too bright, while we keep the dark side obscurely in the dark; in fact it is much easier to show up the bright side than the dark side—it seems to loom up so easily.

In conclusion, I desire to say, that the practice of exhibiting granulated honey in glass, at our Expositions, is doing good service by way of an educator; both dealers and consumers begin now to regard granulation as a proof of purity.

The following were duly recorded as members for the present year :

G. A. Adams, Perrysburg, O.  
 J. H. Andrus, Almont, Mich.  
 Geo. H. Ashby, Albion, N. Y.  
 H. J. Ashley, M. D., Machias, N. Y.  
 C. S. Avery, Millard, Neb.  
 Richard Bangham, Windsor, Ont.  
 Ira Barber, De Kalb Junction, N. Y.  
 O. J. Bedell, Kawkawlin, Mich.  
 A. D. Benham, Olivet, Mich.  
 E. Berkey, Savannah, O.  
 H. R. Boardman, East Townsend, O.  
 Sam'l H. Bolton, Benton, O.  
 F. C. Burmester, Irving, N. Y.  
 W. H. Burr, Detroit, Mich.  
 Mrs. V. E. Burton, Detroit, Mich.  
 Hiram Chapman, Versailles, N. Y.  
 A. B. Cheney, Sparta, Mich.  
 L. T. Christianey, Toledo, O.  
 F. S. Clark, Bowling Green, O.  
 W. E. Clark, Oriskany, N. Y.  
 Rev. W. F. Clarke, Guelph, Ont.  
 F. S. Comstock, North Manchester, Ind.  
 B. F. Conley, Brighton, Mich.  
 A. J. Cook, Agricultural College, Mich.  
 E. J. Cook, Owasso, Mich.  
 Henry Crife, North Manchester, Ind.  
 H. D. Cutting, Clinton, Mich.  
 C. P. Dadant, Hamilton, Ills.  
 G. M. Doolittle, Borodino, N. Y.  
 Frank A. Eaton, Bluffton, O.  
 Will Ellis, St. Davids, Ont.  
 Martin Emigh, Holbrook, Ont.  
 Jas. Forncrook, Watertown, Wis.  
 A. M. Gander, Adrian, Mich.  
 F. A. Gemmill, Stratford, Ont.  
 H. C. Gibson, Burr Oak, Mich.  
 Geo. B. Goodell, McGee's Corners, N. Y.  
 John G. Gray, St. Catherines, Ont.  
 A. W. Greene, Florence, Ont.  
 J. B. Hall, Woodstock, Ont.  
 Benj. Harding, Kent, O.  
 Mrs. L. Harrison, Peoria, Ills.  
 M. Higgins, Windsor, Ont.  
 Geo. E. Hilton, Freemont, Mich.  
 E. L. Hubbard, Water Valley, N. Y.  
 M. H. Hunt, Bell Branch, Mich.  
 H. F. Hunt, Villa Mastal, Quebec.  
 W. Z. Hutchinson, Rogersville, Mich.  
 C. R. Isham, Peoria, N. Y.  
 D. A. Jones, Beeton, Ont.  
 August Keothen, Flint, Mich.  
 A. W. Kistendorfer, Oak Park, Ills.  
 Otto Kleinow, Detroit, Mich.  
 Rev. L. L. Langstroth, Oxford, O.  
 Silas M. Locke, Wenham, Mass.  
 N. W. McLain, Aurora, Ills.  
 James McNeill, Hudson, N. Y.  
 J. J. McWhorter, South Lyon, Mich.  
 A. E. Manum, Bristol, Vt.  
 J. J. Martin, North Manchester, Ind.  
 Dr. A. B. Mason, Wagon Works, O.  
 D. F. Moe, Parma, Mich.  
 Elias Mott, Norwich, Ont.  
 C. F. Muth, Cincinnati, O.  
 Thomas G. Newman, Chicago, Ills.  
 S. F. Newman, Norwalk, O.  
 Geo. A. Ouram, Berlin Heights, O.  
 S. T. Pettit, Belmont, Ont.  
 Thos. Pierce, Gansevoort, N. Y.  
 P. M. Puhl, South Toledo, O.  
 John Rey, East Saginaw, Mich.  
 M. G. Reynolds, Williamsburg, Ind.  
 J. A. Robison, Findlay, O.  
 L. C. Root, Mohawk, N. Y.  
 C. M. Ruland, Rockton, Ills.  
 George Schook, Three Rivers, Mich.  
 C. W. Shepard, Le Roy, N. Y.  
 Geo. Smith, Amadore, Mich.  
 G. W. Stanley, Wyoming, N. Y.  
 James P. Sterritt, Sheakleyville, Pa.  
 R. L. Taylor, Lapeer, Mich.  
 Mrs. R. L. Taylor, Lapeer, Mich.  
 F. J. Temple, Ridgeway, Mich.  
 E. W. Thompson, Hinsdale, N. Y.  
 N. O. Thompson, Cold Water, Mich.  
 W. O. Titus, Toledo, O.  
 James Ure, East Saginaw, Mich.  
 J. Vandervort, Laceyville, Pa.  
 J. Van Deusen, Sprout Brook, N. Y.  
 T. L. Von Dorn, Omaha, Neb.  
 E. Walker, Berlin Heights, O.  
 Byron O. Walker, Capac, Mich.  
 Mrs. Byron Walker, Capac, Mich.  
 H. L. Wells, Defiance, O.  
 W. C. Wells, Phillipston, Ont.  
 M. S. West, Flint, Mich.  
 L. C. Whiting, East Saginaw, Mich.  
 Edwin Willets, Agricultural Coll., Mich.  
 Wm. Wilson, Burr Oak, Mich.  
 A. D. Wood, Rives Junction, Mich.  
 L. C. Woodman, Grand Rapids, Mich.  
 Mrs. L. C. Woodman, Grand Rapids, Mich.  
 M. D. York, Millington, Mich.

The Rev. L. L. Langstroth was called upon for a speech, and upon arising he was greeted with a storm of applause. He gave a very interesting account of the rise and progress of modern bee-culture in this country, and of the invention of the movable-frame hive.

Pres. Root appointed the following committees :

On Finance.—G. M. Doolittle, W. F. Clarke, and Prof. A. J. Cook.

On Statistics.—Thos. G. Newman, D. A. Jones, and Silas M. Locke.

On Resolutions.—Prof. A. J. Cook, W. F. Clarke and R. L. Taylor.

On Exhibits.—Dr. A. B. Mason, J. B. Hall, and G. M. Doolittle.

Thereupon the meeting adjourned until 2 p.m.

#### AFTERNOON SESSION.

Pres. Root called the meeting to order at 2 p.m., and announced that the first business would be the address of welcome by Hon. Edwin Willets, President of the Michigan Agricultural College. President Willets, on arising, was greeted with enthusiastic applause. His address was as follows :

**MR. PRESIDENT, LADIES AND GENTLEMEN:**—It becomes my duty, and it is a pleasure, to welcome you to the State of Michigan. I know of no reason why I should be asked to do so, save, perhaps, because for fifty years I have been a citizen of the State, and at present represent the Michigan Agricultural College, which institution makes a specialty in bee-culture and instruction in the habits and propagation of bees.

We have those present who can more fitly represent that feature of the institution than myself, but neither they nor any one else can welcome you to our State with a more hearty greeting than can I. We are glad to see you in our midst. There is a growing interest here in the industry that you represent to-day. Michigan easily ranks high in the production of honey. The breezes are tempered by our inland seas, and our soil is generous in foliage and flowers. We are strangers to extreme drouths and pestilential moisture. We are not in the path of the blizzard or the tornado. Nearly every foot of land in our Southern Peninsula takes kindly to the plowshare, and rejoices in a fertility that responds heartily to the demands of the husbandman. We are a busy people, in busy homes, and we harmonize easily with the "busy bee." We understand each other—we and the bees—and each pursue our vocations without antagonism. Hence there is room for both, without hostility and mutual profit; and all we need is the dissemination of such information as you can give, to lead us to a more general pursuit of your industry.

We shall expect an impulse in that direction as the result of your deliberations. You represent no mean vocation. Ever since and before Jacob sent as a present to propitiate the hard master in Egypt, a little balm, and a little honey, spices and myrrh; ever since Columella wrote,

and Virgil and Horace sang, the sweet elixir has tempted the palate of mankind. There is no substitute for it; the analysis of the chemist is unable to produce it; man cannot make it, or grow it, or rectify it, and till Millennium's dawn it will be nectar to men and gods.

Yours is no insignificant industry. You represent 3,000,000 colonies of bees, with an annual product of surplus honey of 100,000,000 pounds. Under the impulse of this and kindred associations, the product is increasing annually. The cheap sugar of to-day has no perceptible influence upon the demand or the price of the commodity. As the country increases in wealth and luxury, the demand grows with its growth, and increases with the means to gratify the appetite. The best minds in the field of science have contributed to the more successful promotion of the industry. Aristotle, Virgil, Columella, Pliny, Swammerdam, Ray, Latreille, and a host of others, ancient and modern—not to forget Langstroth, Cook, Quinby, Root, and others of our day—have studied, observed, experimented and written about bees and their habits, till we know how best to rear them, and how best to utilize their harvest of sweetness; so that to use the words of a learned Judge of one of our Courts, who said, "In modern days the bee has become almost as completely domesticated as the ox or the cow. Its habits and and its instincts have been studied, so that it can be controlled with nearly as much certainty as any of the domestic animals."

You have almost taken it out of the class *ferae naturae*. The propensity to mischief has been so diminished, that serious injury is almost as rare from a bee as from the horse, and far less than from the dog. The Courts take kindly to the bee. They look with favor upon animals or insects that are useful to man; with disfavor upon such as are purely noxious or useless. There is no question of the utility of bees. I note this fact, as I observe a little apprehension among apiarists, about the attitude of Courts occasionally, and the fear that there may grow up some legal limitation or liability that shall destroy your industry. Bees were here before Courts or juries, and they have the right of way, and will keep it so long as their product is desirable. The recent case that has caused some apprehension, will be found, I hope, to be based upon an utter misconception of the bee and its habits. It will be found, I have no doubt, that a sound grape is absolutely armor-proof to the attack of the bee. It is only when the armor is broken that the attack is made. A grape with a broken shell is practically valueless—worthless, except for the wine-press; and for one, I frankly say, gentlemen, that as between the wine-press and the bee—as between alcohol and honey—I am for the bee and for the honey, and I believe the Courts will give the bee the case.

But, gentlemen, I am not here to keep you from your deliberations. I

again welcome you to Michigan, and trust that your stay with us shall be so pleasant that your recollection of it shall be a life-long joy.

Pres. Root said that he strongly advocated the location of this meeting at Detroit, and he was fully satisfied that there was wisdom in the choice. He had always been much interested in Michigan bee-keepers, and was very glad to meet with so many of them here. The matter of defense of our rights as bee-keepers had been mentioned by Pres. Willets, and he was much in favor of unitedly defending our rights. As Mr. T. G. Newman was General Manager of the Bee-Keepers' Union, an organization created for this purpose, he would call upon Mr. Newman to make a statement concerning what had been done, and what was expected to be done in the future, by the organization of which he was manager. Mr. T. G. Newman then delivered the following address, on the

#### NATIONAL BEE-KEEPERS' UNION.

During the past year it has become necessary to form a Bee-Keepers' Union. As this society is a Continental one, it would seem to be appropriate that some notice should be taken of it by this Convention. With your permission I will state a few facts, and leave it to those present to say whether the work of the Union shall be approved by them or not.

Last June Mr. S. I. Freeborn, an extensive apiarist of Wisconsin, was sued by a neighbor, who kept a flock of sheep, for alleged annoyance to his sheep by trespassing bees.

It was understood that this was to be a "test case," and if the plaintiff succeeded in obtaining a verdict in his favor, either by the ignorance or prejudice of a jury, other bee-keepers would be likely to be sued to recover damages done to pastures, vineyards, and gardens by bees; and any one owning a few square rods of land, devoted to almost any purpose, may try to recover damages from all the owners of bees in the vicinity.

Mr. James Heddon suggested the formation of a Bee-Keepers' Union in defense of their rights, and to protect their interests. Such a Union was formed, and officers elected as follows:

President—James Heddon.

Five Vice-Presidents—G. M. Doolittle,

G. W. Demaree, A. I. Root,

Prof. A. J. Cook, Dr. C. C. Miller.

Manager, Sec'y & Treas.—T. G. Newman.

The officers were made an Advisory Board, with full power to act.

This Union, as soon as organized, employed attorneys, obtained "opinions of law" from bee-keepers who were also attorneys, and made such a stir in the sheep-bees case, showing such fighting enthusiasm, that the Judge made a thorough examination of the laws of the State, and concluded that there existed no laws or rulings upon which he could instruct the jury; and bee-keepers have cause for pride in the success that attended their efforts in this matter.

In California a suit has been tried in a Justice's Court against Mr. Bohn

for alleged damage done to grapes by his bees. This suit was lost in the lower Court, because witnesses were obtained who testified that they had seen the perforation and destruction of the grapes done by Mr. Bohn's bees. In vain did the defendant's attorneys prove by a score of witnesses that the bee's tongue could only be used to extract sweets from the flowers—not to bore after them. The evidence of the eye-witnesses of the plaintiffs had weight with the jury, and they accordingly returned a verdict against the defendant for \$75 and costs of suit, which amount to over \$60. The damages claimed were \$299.

The National Bee-Keepers' Union advised Mr. Bohn to appeal from the decision of the Justice's Court, and assured him that the Union would stand by him, and aid in the appeal by sending money, obtaining legal advice, depositions from scientific experts as to the incapability of bees to puncture grapes, etc. The appeal has been taken, and our California brethren are now busily at work getting members for the Union there.

A California apiarist says: "If it goes against us in the higher Court, there will be no end of the trouble that will arise, and our bee-industry will receive a death-blow in Southern California."

An apiarist in Anaheim, Calif., had the fence around his apiary torn down, all his bees killed by sulphur, the hives piled up under a valuable pepper-tree and consumed by fire. Another apiarist was threatened with hanging—all because some fruit-growers had moved into the neighborhood after his apiary had been established several years, and they wanted to compel him to move away with his bees.

As a Continental body of apiarists, have you no word of encouragement for an organization created for the purpose of defending the rights and protecting the interests of the bee-keepers of America? Do you say: "Let us co-operate, and, if necessary, maintain our rights as bee-keepers in the highest courts of the land?" That can be done only by having sufficient money to defray the expenses, and such are usually very high. To be sure, it will be a small matter, if all will bear their part of the burden. One thousand dollars of expenses when divided between 1,000 persons, is only a dollar for each, and can easily be borne; but when one has to pay it all, it becomes a heavy burden; and, to many, one that would be impossible to bear. United effort is essential to successfully defend our chosen pursuit!

The National Bee-Keepers' Union needs strong hearts, willing hands, and many shekels. Are you willing to help? Is your name enrolled among the "National Guards"? If not, lose no time in becoming a member, and thus help to fight the battles of our pursuit in defense of its rights! If we can raise a column of patriots sufficiently strong to present a formidable front, we shall dare the envious ones to "bring on their lawsuits,"

and by "an imposing array" and "unbroken front," gain a lasting and permanent victory!

Mr. S. T. Pettit said that it was necessary to band together to defend ourselves.

Rev. W. F. Clarke said, "United we stand." He would prefer to have the National Bee-Keepers' Union consolidated with the North American Bee-Keepers' Society if it was possible. He was one of the first in Canada to join the Union, and said that if it is not consolidated, we must co-operate with the Union in the most decided way.

Mr. W. E. Clark said he agreed with the last speaker—if it can be done, he was in favor of consolidation.

Mr. C. R. Isham said that the great fight for the Union was to be fought in California in the raisin district. We must sustain the Union, and defend our pursuit.

Mr. W. L. Von Dorn said that the bee-keepers of Lower California were in danger of being entirely driven out by the raisin-growers.

Mr. C. F. Muth remarked that the matter was one for the Courts to decide—not that of one pursuit against another.

Prof. A. J. Cook said that it was a case of bee-keepers and fruit-growers on one side, and ignorance on the other. The bees are the best friends to fruit-growers, to fertilize the flowers, and thereby produce the fruit. In the spring when there are but few insects to fertilize the flowers, the bees are very valuable.

Mr. H. R. Boardman advised conciliation, when there are complaints against bees by fruit-growers and others. A crate of honey given to such complainants, will do much to cause them to feel differently.

Rev. W. F. Clarke said that in Court, a crate of honey would do no good—law must decide the case. He then offered the following resolution:

*Resolved*, That a committee of seven be appointed to consider and report upon the best methods of protecting the interests of bee-keeping from legal attack prompted by ignorance.

The resolution passed, and the committee was appointed as follows: W. F. Clarke, T. G. Newman, W. E. Clark, James Heddon, C. F. Muth, S. T. Pettit, and Prof. A. J. Cook.

The President's annual address was then given as follows:

BROTHER BEE-KEEPERS OF NORTH AMERICA:—We have assembled here at our annual convention to consider that which pertains to the best interests of our pursuit. I shall not occupy your time with an exhaustive address, for the programme is full, and very complete, and our time is short at best to consider the many important subjects which will be presented. I am here as a member of this Society to assist as best I may in throwing light upon the topics brought before us. I take it as an expression of good-cheer and great generosity in those who have arranged the preliminaries for these meetings, that

everything for the comfort of us all has been so amply provided, and that all arrangements are so thorough and complete. Let us see to it that we endeavor to perform our part in as faithful and unselfish a manner as our Committee has done.

We have reached a crisis in the history of bee-keeping which must be met by those who are interested in the pursuit, in a broad, honest, and unselfish way. Every well-informed bee-keeper is reminded in the most unmistakable manner that the time when large profits may be realized from keeping bees, has passed. Each year, the prices of our products have been reduced, until at the present time we find many of our markets overstocked, and our honey selling at rates which allow us little profit for producing it. These are stern facts which must be fairly met. It is not my purpose to attempt to instruct those who are already experts in the business. Their lessons have been taught them by dearly bought experience, the results of which are due to the beginner, and to those whose experience has been more limited.

We have passed through a period of great enthusiasm, and have indulged in much that has been unwarranted and injudicious. We have been far too selfish. As supply-dealers and publishers of bee-literature, we have been far too anxious to present the bright side of our calling. If we have been unwise in the past, we should be thankful that by the light of these past experiences we are able to see more clearly our way for the future. Many years ago, beginners were heard to ask if it were advisable to engage in bee-keeping as an exclusive business. The answer should have been then as now—"Commence moderately, and let experience decide as you advance." The real question now seems to be, "Shall we commence at all?" or "Shall those of us who are already engaged in it, continue?"

In answer to such questions I would offer the following suggestions: 1. Our calling is an honorable one, and is an essential branch of agriculture, in that the honey-bee is indispensable to the fertilization necessary in the vegetable kingdom. Wherever civilization advances, there the honey-bee is found. 2. Honey is a wholesome and desirable article of food. 3. It is furnished to us at our very doors, and if we fail to preserve it, the odor of wasting sweetness constantly reminds us of our neglect and loss.

With these points in view, is it not evident that a great work is to be accomplished in applying the lessons of economy and industry taught us by the bees themselves, to the accumulation of this freely-given production in the most desirable and profitable way?

We have been extravagant in many of our expenditures. These we must endeavor to reduce, to correspond as much as possible with the reduction in prices. We have incurred a large expense by the great amount of labor which we have required in unneces-

sary manipulation. In this I anticipate a change as we advance, which will result not only in economy of time and labor, but also in avoiding many serious consequences. It is evident that we yet need much light upon many of the simple and practical, as well as on the scientific phases of our calling. With every advance made in apiculture, it becomes more apparent that there are new fields of investigation and research, which promise to yield information, and are destined to work marked changes in our methods of managing bees. Only those will succeed who are willing to practice the most rigid economy, and who will be satisfied with moderate pay for honest work performed.

It is evident that the effort has been too much in the direction of increasing the production, rather than to create a corresponding demand for the same. I think I am safe in the assertion that no effort of ours is needed which shall tend to an increased production of honey for our present, general, overstocked market. Last season extracted honey was shipped to New York from California by car-loads. The market was already overstocked with the best grades of Eastern honey, and the result was such that California bee-keepers will hardly care for a repetition of the experience. The present season has afforded another illustration. Honey has been shipped very largely from the Eastern and Middle States to New York, and the outcome of this has been that the choicest white honey in sections has sold at ruinously low rates, and some of it has actually been returned to grocers in our own vicinity. By these methods we practically establish these unprofitable practices ourselves.

The resource seems to be that we must enlarge our field of consumption. This can be done by each bee-keeper, by encouraging home consumption in his own immediate vicinity, and also by opening up new avenues for the uses of honey. A demand thus created would measurably relieve the overburdened city markets; and in this way we would be able in some degree to maintain reasonable prices. With the present facilities for disposing of our products, it is difficult to avoid the conclusion that there is an over-production. Whether this will grow to become a positive fact, or whether bee-keepers will succeed in causing the demand to keep pace with their success in producing, is the problem to be solved in the near future.

Much will depend upon the answer to still greater questions which are agitating the best minds of the day. If the thousands of dollars which are annually spent in nearly every community for that which tends to degrade, and to the production of evil, could be turned to the purchase of that which is wholesome and beneficial, the danger of over-production in this, as in other useful callings, would be little to be feared. My faith in the fact that in the end the right will prevail, leads me to the conclusion that any calling which presents

such a wide field for the intelligent and patient worker, and student of nature, and which is so productive of a harvest of good, must always command those who will find it pleasant and profitable to continue in the work until the harvest is complete.

Mr. C. F. Muth remarked that in New York they principally demanded honey in glassed sections or in paper-boxes. In the West, such are unsalable. We, here, require it in un-glassed sections with the crates glassed.

Mr. C. R. Isham said that our honey-producers can sell all their honey in glassed sections, and it is desirable to do so in order to preserve its beauty and purity.

Mr. Thompson said that he wrote to New York asking for a bid for best glassed honey, and he was offered only 10 cents per pound for it delivered in New York.

Mr. J. B. Hall proposed a vote of thanks to Pres. Root for his able address.

Mr. G. M. Doolittle then read an essay on

#### THE PRODUCTION OF COMB HONEY.

He said that there were four things important in the production of comb honey: First, a good queen; second, the getting of the bees at the right time to secure the harvest; third, a skillful apiarist; and fourth, the right kind of a hive. Remarks were made on each of these points, and Mr. D. said that we could divide and subdivide these four heads, especially the last three, yet the fundamental principles would not be changed.

The discussion on comb foundation took a general and rather desultory course. Mr. J. B. Hall was asked to state his method, and confined himself to his experience with comb foundation.

Rev. W. F. Clarke said that Mr. Doolittle's essay was professedly on the production of comb honey, but what he said was just as applicable to the production of extracted honey. A good queen, plenty of bees to gather in the honey harvest, a skillful apiarist, and a good hive—were not these just as useful for the production of extracted as comb honey? What we want is the points of a skillful apiarist required to get large crops of comb honey. We want to know how to do it. Our most successful producers of comb honey rather tell us "how not to do it." They appear not to like to explain things. They take Burns' advice to his friend Andrew:

"Still keep a secret in your breast  
Ye never tell to any."

For several years at these conventions he had tried to get Mr. Hall to explain how he gets such large crops of splendid comb honey, but he had never done it.

Mr. Hall: "I should have to make the man."

Mr. Clarke: "Well, here he is; take the raw material and make the man. That's just what I want."

Much amusement and bantering of Messrs. Doolittle and Hall to explain

the *how*, but the wily veterans did not come to the scratch.

Amid much laughter the subject was laid on the table, and the next order of the day taken up, viz: an essay by Mr. C. P. Dadant, on

#### EXTRACTED HONEY.

Comb honey is nice, but it is a fancy article, and is too costly for the general public who want an article not costing more than sugar, with which it competes, and if honey can be supplied as cheaply as sugar, it will, to a large extent, supersede it. In their experience, their sales had largely increased, and the home market now readily consumes all their crop. Extracting honey checks swarming, without a doubt. It enables the apiarist to take care of a larger number of colonies. A larger quantity of honey can be obtained, and much outlay for combs, crates and boxes is saved. Mr. Dadant considered it a mistake to suppose that there is an over-production of honey. It is only beginning to be considered a staple. When honey is as common on the tables of the farmer, and even laborer, as sugar, and when it is found as common by the keg and barrel in wholesale stores as sugar, then only shall we produce as much honey as the country can use. The revolution in bee-keeping of which Father Langstroth speaks, has come into effect, but bee-keepers are only beginning to find out all the advantages and all the growth which the bee-business must derive from the invention.

Dr. Mason described his method of getting extracted honey, but complained that he could not get more than 65 pounds per colony. He was asked how many combs he used, and replied, "eight."

Mr. C. F. Muth could not comprehend how the Doctor could manage with so few frames. He wanted at least 10 frames for the brood-nest, and then another story for extracting. Even his bees, kept on the house-top in the city of Cincinnati, had given him averages double and even treble what Dr. Mason had obtained, and from hives in the country where they had not so far to fly, he got far more honey.

Mr. W. E. Clark said that the President had been the most successful producer of extracted honey in the East, and he would call on him to explain his methods.

Pres. Root, in response, said that it was perfectly true, as Mr. Clarke had said, that Mr. Doolittle's requisites for producing comb honey were just as applicable to the production of extracted honey. A good queen, for example, was just as necessary for the one as the other. In both cases wise manipulation was needed, and it took a large amount of study to know what is wise manipulation. Certainly we must have large colonies of bees to gather the honey, then we must extract it at the time when it could be done to the best advantage and with the least hindrance to the bees. It was hard to lay down specific rules—every bee-keeper must be a law to himself, and find out the methods

best adapted to his own locality. Experience must be bought by practice, and at considerable expense; he only hoped that it would not cost others as much as it had cost him. Pres. Root gave the stereotyped directions for the production of extracted honey, but said that these were subject to modification in individual cases.

Mr. S. T. Pettit gave his experience in producing extracted honey. He had missed it by not leaving the honey in the hive long enough to ripen. One season his honey was all of an inferior quality, owing to this cause. He did not believe that we could ripen the honey as well as the bees themselves do it. He said that we should have at least one-third of the honey capped before extracting, and he believed it was better if all was capped over.

Rev. L. L. Langstroth did not know that he could add much to the ocean of intelligence that was tiding all around, but he wished to say a word or two. He believed there were many things that the bees could do—certain things better than we can—and ripening honey was one of them. There was too much artificial work in bee-keeping. One bee-keeper had invented nippers to pull dead bees out of the cells, but live bees would do better.

Dr. Mason said that the "big-bugs" of the Convention had been poking fun at him for getting only 65 pounds of honey per colony, but they would find it impossible to get an average of 300 pounds in his locality—a city on one side and a wilderness on the other. Small as his average yield was, it was larger than that of any of his neighbors. He wished that his critics would show him how to produce 300 pounds per colony, but the trouble was as Mr. Clarke said, they did not disclose their secrets.

Rev. W. F. Clarke wished to ask if formic acid in honey was not the element which gave it its keeping qualities. He put the question to Prof. Cook. For his own part, he believed that the formic acid was added by the bees in the capping process, which was carried on mainly by the use of their tails—the sting—being the last polishing tool. It was because the formic acid was thus added that honey must be one-third capped to be good, and all capped to be first-rate.

Prof. Cook thought that no one knew how or when the formic acid was added. He was also of the opinion that too much stress was laid on the matter of taste. Few could discriminate as thoroughly as had been suggested.

The Convention then adjourned until 7:30 p.m.

#### EVENING SESSION.

The meeting was called to order at 8 p.m., by Pres. Root. An essay was read as follows, by Mr. R. F. Holtermann, of Brantford, Ont., on the

#### CARE OF HONEY FOR MARKET.

I bring this subject before you, fully aware that it is not of as great

importance as many others, being indirectly connected with the production of honey; but on that account it has perhaps not received that public attention which it merits. It is our duty when blessed with the means to procure a crop of honey, that we should acquaint not only ourselves but every bee-keeper with what will secure to us the article in the highest state of perfection, and place it thus in the consumers' hands. Have we, as a body, endeavored to do so? Looking at it from a business stand-point, past experience has taught us that in order to realize the best results financially, from any article extensively produced, it is necessary not only to better our own but we must better that of the entire land.

Let us imagine the land completely destitute of vegetation. Here is a heavy soil, in the distance is a sandy one, and between, all grades of soil. Here is a hill, there a swamp, and at other distances, intermediate elevations. Now, could our eye stretch from north to south within the honey-producing area, and were this area to be decked with our present vegetation, which of the aforementioned conditions would influence the quality of honey? The heavy soil would give us a richer honey than the lighter; the more extremes of cold climate would give a better quality than the more equable. Would the high and the low land influence it? We know that honey from every species of flower has its peculiar flavor, no matter how indistinct, and that the season, its winds, temperature, and degrees of moisture influence not only the quantity, but the quality of our honey.

The progress bee-keeping has made, and so many making a specialty of it, has enabled us in a measure to conduct ourselves accordingly; but to the ordinary bee-keeper most of the previously named conditions cannot be controlled. But, how much lies within our power!

One of the first questions would be, when shall we extract? Shall we extract before or after the honey is sealed? What are the advantages and disadvantages of the two systems? If entirely sealed, we require to uncap a large surface, the bees must with the ordinary appliances be cramped for store-room, the brood-nest becomes contracted, not alone meaning loss of time until extracted, but many think they do not regain their old energy for the remainder of the season. The advantages would be, honey called ripe, subject to the before-named conditions.

When is honey ripe? With the system of extracting when the honey is unsealed, there is no uncapping, and bees have plenty of store-room, but the quality is inferior; and right here a friend would step in with his ripening can. But we have made no light mistake; for in the past our honey has been handled too much, as if it could lose nothing by having it come in contact with the air. What imparts that peculiar aroma to honey, and gives each kind of honey a dis-

tinct flavor? Is it not largely a volatile oil? Do we not know it is being distilled from every flower, as we pass through a clover-field in blossom? and in evaporating and otherwise coming in contact with the air, we lose this.

Many find that to extract honey when one-third capped, answers well; the honey to be put into deep tanks or barrels holding about 600 pounds each, and left for a week. This causes the light, thin honey to rise to the top—generally it is not 10 per cent., and this can be disposed of a little cheaper—and the rich, ripe honey remains. One week more of exposure is ample for clover, and it becomes sweet without the flavor; basswood longer, according to the taste. Thistle honey has a very distinct odor and taste, but it is very volatile, and requires but little exposure. If we handled our extracted honey thus, would it not take the place of comb honey more?

What is meant when consumers say that they miss a peculiar richness in extracted honey, which the comb will give them? Is it all fancy? How many bee-keepers have greeted you with the remark, after tasting your basswood honey, "Ah, that is pure honey." How many have thought, after tasting the long-exposed clover honey, "That is sugar syrup." The former loses its flavor less readily; the latter more readily.

Has our comb honey been handled with proper care? Should it not always be kept not only dry, but at a temperature that the delicate scales of wax—cell caps—never crack from too low a temperature? Does honey ferment in the cells and crack the wax, or does the cell break, permit access to moisture and atmosphere, and that cause the honey to ferment?

Mr. Boardman considered this matter of great importance. That honey was often deteriorated by keeping was undeniable, and he would like to know how it happened so, that it might be guarded against.

Mr. Jones said honey thickened by evaporation, and that it was liable to be injured by evaporating too fast or too slow.

Prof. Cook explained the difference between evaporation and crystallization. Honey can only thicken by evaporation, and to evaporate, it must have air; therefore the sealing is not air-tight. Crystallization is a different affair, and is akin to formation of ice, resulting from the cooling process.

A member said that he thought that honey thickened with age.

Mr. Doolittle gave an instance in which honey was spoiled by moisture swelling the honey, so that the cells were broken, and the honey turned sour in the course of a few months.

Mr. Thompson, of New York, said that he had been greatly troubled with the moth getting into comb honey. He had tried sulphur fumigation with them, but had not succeeded as he could have wished.

Mr. J. B. Hall, of Ontario, on being called upon, gave his experience and practice. He said that the moth

would give no trouble unless there was bee-bread in the sections. He was in the habit of fumigating a room 8x10 feet with a pound of sulphur, as a precaution against the moth, and then kept up an even temperature. He had kept it 2 years as good as new.

Mr. Heddon said that there was but little danger of deterioration, if honey was taken proper care of. It should be kept in a temperature higher than the common atmosphere, else it would attract and absorb moisture, and thus be injured. He had no trouble with the moth-worm, and did not believe that the moth would live on pure beeswax. There must be some pollen—some nitrogenous matter in order to form animal tissue.

Mr. C. P. Dadant would confirm the statement that the moth-worm could not exist on pure beeswax.

Mr. Jones asked if any had been troubled with the moth in parcels of wax forwarded for manufacture into comb foundation. He had.

Mr. Heddon said that there was always more or less pollen in such beeswax.

Prof. Cook said that there could not be animal life without nitrogen, and there could not be putrefaction without nitrogen.

Mr. Heddon said that we should take such precautions as would keep out flies, wasps and other insects. By this means the moth-worms would be effectually excluded. He had his honey-house protected with wire-screens, and the moth gave him no trouble.

Some other observations were made on the subject, when the convention adjourned until 9 a.m. of the following day.

## SECOND DAY—WEDNESDAY.

### MORNING SESSION.

The Convention was called to order at 9:30 a.m., by Pres. L. C. Root, who announced the following as a committee to answer any questions that might be placed in the question-box: S. F. Newman, S. T. Pettit and H. R. Boardman.

Miscellaneous discussions being next in order, considerable disapprobation was manifested by many members, over the report of Prof. H. W. Wiley, of the Department of Agriculture at Washington, giving his analysis of different samples of honey furnished him by bee-keepers. In his annual report he put down many samples as "apparently pure," and many as "probably impure." It was the general opinion that if he could not analyze such products to a certainty, he should say so in his report.

The friends of Mr. A. I. Root, having learned that his 46th birthday occurred on the second day of the Convention, it was suggested that those who desired to do so should, during the intermission, contribute 10 cents each, to Mr. Muth, with which to purchase a birthday present for Mr. A. I. Root. A copy of "Milton's Paradise Lost," beautifully printed, bound, and illustrated, was purchased, and the Rev. W. F. Clarke was selected to present it to Mr. A. I. Root

during the morning session, which he did in a very pleasant way. Some other friends also presented him with a bouquet of flowers. Mr. Root replied briefly by thanking those who had been so thoughtful. He valued the kind thoughts much more than the gift, though that was beautiful. He felt that such kindness was undeserved.

Mr. C. F. Muth, of Cincinnati, O., then gave an address on "Marketing Honey." He referred to the low price of honey, which was caused by the cheapness of other sweets, adulteration of honey, and ignorance of the many uses of honey. To secure the best price, we must practice the most scrupulous cleanliness in every manipulation. Extracted honey is often damaged by being put into whisky-barrels. There is charcoal on the inside edges of the staves, and specks of it get into the honey, spoiling its appearance. Clean barrels should always be used. Comb honey must be white, well-capped, and put up in a neat, attractive manner. Only thus need the top figure of the market be expected.

A discussion arose as to the most salable size of sections. There was a very full expression of opinion, which was strongly in favor of one-pound sections. It was not deemed advisable to make any size exclusively, as there was a limited demand for other sizes, particularly in certain markets.

An address was then delivered by Thos. G. Newman, on

### PASTURAGE FOR BEES.

A carefully-prepared estimate reveals the fact that in North America (the territory covered by this Society) there are 300,000 persons who keep bees. The annual product of honey amounts to over one hundred millions of pounds, the value of which is about fifteen millions of dollars!

May not these figures give us a full comprehension of the dignity of our mission, the magnitude of the work before us, and the exalted possibilities which may inspire us to fresh zeal and grander achievements in our pursuit?

In passing—let us contemplate, for a moment, how invention, art and science, have followed every "progressive step" in apiculture! Just think of the crude methods of our fathers, and then contemplate the wonderful improvements of to-day! Instead of the tubs and pails of yore, containing broken combs of honey, bee-bread and dead bees, taken from the breeding apartment of the hives, the result of murdering the bees by fumes of sulphur, and then robbing their homes of the "stores" laid up for winter—see the beautiful little sectional-boxes in which we have educated the bees to build virgin combs, and then to fill them with honey from Nature's laboratory—at man's behoof and for man's nourishment! This is but one item in the long catalogue of accomplishments, but it illustrates the apicultural development of the scientific progress and art of this ever-advancing age!

Surely, these are grand achievements! but shall we with them rest

and be satisfied? No! says the impulsive and enthusiastic bee-keeper—show us the exalted possibilities of the future! Teach us how to obtain a crop of honey day after day, month after month, and year after year! Well, this is the duty imposed upon me by your committee—why, I know not; nor did I ask; but I will seek a solution of the problem by leading you into “green pastures,” filled with myriads of “flowers,” in which Nature distils the honey, drop by drop, and invites the bees, by their gorgeous hues, to come and dip into their tiny fountains, and feast and fly, and feast continually. These fields of splendor will point you to success—to shining dollars, and affluence!

Ask the breeders of stock, the shepherds, and the dairymen, for the secret of their success, and they will point you to their well-tilled fields, green pastures and mountains of hay. They will tell you that they provide corn for their hogs, rich meadows, pastures and hay for their stock, and then naturally expect good results!

Ask bee-keepers upon what they depend for results, and they will have to confess that “luck” has a good deal to do with it; they depend upon natural forests, neighbors’ clover fields, wild flowers in the fence corners, roadsides and wild lands; and if they are “lucky enough” to have these in due proportion to their bees, they will sing a song of gladness; but if not, their long visages will tell of hopes blasted and prospects blighted!

But alas, with advancing civilization comes the woodman’s ax, cutting down the basswood, elm, oak and maple trees. The farmers’ plow destroys the magnificent wild floral carpet supplied by nature, and the poor bees often find nothing to gather—the wild flora is destroyed—the honey all gone—and starvation stares them in the face! Nothing remains for them but to destroy their brood, kill their drones, and if possible to hold out on half-rations, until some stray wild flowers, unmolested by the plow, in fence corners or by the roadside, replenish their scanty stores; but if these are denied, they “succumb to the inevitable”—and their owner declares he “has no luck with bees!”

Now, what is the duty of the apiarist, in this state of affairs? The answer is plain, positive and unmistakable. Pasturage for the bees *must* be provided—it is an absolute necessity. He must study the honey seasons of his locality, and supply the deficiency by planting white Alsike or sweet clover, mignonette, borage, motherwort, cleome, mustard, rape, etc., and thus provide the bees with honey-producing flora when the natural supply is insufficient or entirely destroyed.

Good judgment must, of course, be exercised in the selection of seeds for planting. If white clover is plentiful, and fall-flowers abundant, scatter mints “to fill the gap.” If basswood is the main stay for honey, then sow sage, motherwort, and other early nectar-yielding plants or trees. The

goldenrods, asters, buckwheat, sweet clover, etc., will always pay to cultivate for fall honey. The latter (sweet clover) with its white, modest bloom will gladden the eye in June, and the sweet fragrance of its flowers will linger till frost and snow comes and the bees are safely placed in “winter quarters.”

We are well aware that many who keep bees have not enough land to spare to devote to bee-pasturage; but in the immediate vicinity of every apiary, and within easy flight of every colony of bees in America, there are waste lands enough, covered with unsightly brambles, burdocks, fennels, mulleins, rag-weeds, etc., which it would *pay* to seed with suitable plants for producing honey. Many of the best honey-plants require but little or no cultivation, after scattering the seeds; and even the poorest honey-producers would be more agreeable to the eye on such waste land than sand-burrs, brambles, fennels, and other weeds which grow spontaneously on roadsides and waste-places.

In view of the uncertainty of sufficient continuous bloom being provided by Nature, and the certainty of annually-recurring periods of cold weather, long and hazardous confinement—to insure success, the apiarist should as carefully and certainly provide pasturage for the bees as to furnish them with hives to shelter them from the cold and storms.

Do you ask, “Will it *pay* to plant for honey?” Let me reply by asking if it *does pay* to keep bees to gather honey at all? If you answer yes, then let me assert—the more bloom, the more honey for the bees to gather; the more honey gathered, the more honey for the market; the more honey sold, the more money for the bee-keeper, and the better the business will pay!

To further illustrate this point: If a honey-flow of 30 days (which constitutes an average honey season, one year with another) will pay—will not 150 days pay *five times as much*? If by judicious planting, we can lengthen the honey season, do we not thereby correspondingly increase the honey crop? and does not this increase of the marketable honey-crop correspondingly increase the income of the apiarist, and add just that much to the material wealth of the Nation?

Rational replies to these queries, by progressive apiarists, ought to demonstrate that *it will pay to plant for honey*; and also that as the country grows older and the population increases, it becomes a *positive necessity*.

Several members concurred in the importance of attention being given to sowing and planting for honey production.

Mr. S. F. Newman spoke of the great reduction in the number of basswood trees, owing to the demand for the timber by those who were manufacturing sections. Ten years ago there were 60 large basswood trees within sight of his apiary; now, all but 5 were gone. He had, however, succeeded in getting them more than replaced by giving away young bass-

wood trees to all who would plant them and care for them. A number planted thus 10 years ago, this year yielded a magnificent crop of honey. The basswood was a fine shade tree, and if bee-keepers would encourage its multiplication, they would find their account in it.

Rev. L. L. Langstroth mentioned the case of a bee-keeper who was thought by his neighbors demented, because he sowed the seeds of sweet clover in a sort of wilderness locality; but as the result he had now a splendid range of bee-pasturage.

Several members spoke warmly in favor of Alsike clover.

Wm. F. Clarke mentioned that it would grow and flourish in low, wet, undrained land, where red clover would not take. He also said that bee-keepers should use their influence to have stock prevented from running at large. It was a just and good law in other views of it, and its passage would double the value of bee-pasturage.

A member suggested that all who had tried the Alsike clover and found it valuable, should intimate the same by rising, when about one-third of the members present arose.

Indianapolis, Ind., was selected as the next place of meeting, and it was voted that St. Louis be in contemplation for the following year.

As the hour of adjournment had arrived, the election of officers was postponed until 2 p.m., when the following were duly elected:

PRESIDENT—H. D. Cutting, Clinton, Mich.  
RECORDING SECRETARY—Frank L. Dougherty, Indianapolis, Ind.  
CORRESPONDING SECRETARY—Mrs. Cass Robins, Indianapolis, Ind.

TREASURER—C. F. Muth, Cincinnati, O.

VICE-PRESIDENTS:  
Alabama—Nelson Perkins, Princeton.  
Arkansas—Geo. B. Peters, Peters.  
Arizona—Jas. H. Brown, Prescott.  
British Columbia—U. Spears, New Westminster.  
California—R. Wilkin, San Buenaventura.  
Colorado—Philip Reardon, Jamestown.  
Connecticut—H. L. Jeffrey, Washington Depot.  
District of Columbia—Rev. J. A. Buck, Washington.  
Dakota—J. H. Townley, Ashton.  
Delaware—Geo. Remington, Wilmington.  
Florida—W. S. Hart, Hawk’s Park.  
Georgia—Dr. J. P. H. Brown, Augusta.  
Illinois—Mrs. L. Harrison, Peoria.  
Indiana—J. Scholl, Indianapolis.  
Iowa—J. M. Shuck, Des Moines.  
Kansas—Chas. Smith, Marysville.  
Kentucky—J. M. Egbert, Salvias.  
Louisiana—P. L. Viallon, Bayou Goula.  
Maine—J. B. Mason, Mechanic Falls.  
Manitoba—Hon. J. H. Wallbridge, Winnipeg.  
Massachusetts—S. M. Locke, Wrentham.  
Michigan—Miss Lucy Wilkins, Farwell.  
Missouri—E. M. Hayhurst, Kansas City.  
Mississippi—Dr. R. M. Blanton, Greenville.  
Minnesota—C. F. Greening, Grand Meadow.  
Maryland—Dr. W. G. Phillips, Galena.  
Montana—Chas. Bruce, Wicken.  
Nebraska—A. A. Leeper, Carson City.  
Nevada—New Jersey—E. Terryberry, Hightbridge.  
New York—Ira Barber, DeKalb Junction.  
North Carolina—H. H. Watson, Statesville.  
Nova Scotia—C. T. Jones, Waterville.  
New Hampshire—M. Harie, Keno.  
Ohio—A. I. Root, Medina.  
Ontario—J. B. Hall, Woodstock.  
Pennsylvania—Arthur Todd, Germantown.  
Prince Edw. Island—Jas. Gourie, Summerside.  
Quebec—H. F. Hunt, Quebec.  
Rhode Island—Wm. J. Tracy, Burrillville.  
South Carolina—S. C. Boylston, Charleston.  
Tennessee—W. P. Henderson, Murfreesboro.  
Texas—W. H. Andrews, McKinney.  
Utah—O. H. Morgan, Salt Lake City.  
Virginia—J. W. Porter, Charlottesville.  
Vermont—A. E. Manum, Bristol.  
West Virginia—A. W. Cheney, Kanawha, Falls.  
Wisconsin—Christopher Grimm, Jefferson.  
Wyoming—James Fields, Fort Laramie.  
Washington—H. A. Marsh, Fidalgo.

[This report will be concluded next week.—ED.]

**SELECTIONS FROM  
OUR LETTER BOX**

**Honey Crop a Failure.**—O. E. Sayler, Pleyto, Calif., on Nov. 24, 1885, writes:

I have failed to see anything in the BEE JOURNAL from this part of California, from the fact, I suppose, that we have not much to say for this year, as the honey crop here was an entire failure; but we hope for something better next season.

**Elements of Royal Jelly.**—J. Rutherford, Scranton, Pa., on Dec. 4, 1885, says:

In answer to Query, No. 167, I would say that a full statement will be found on page 232, quoted from Dr. Donhoff; also, the following is the composition of the chyle, according to an analysis:

Water (by heat)	90.237
Albuminous matter (congelable)	3.516
Fibrinous matter (spontaneously congelable)	0.370
Animal extractive matter (soluble in water only)	1.233
Animal extractive matter (soluble in water and alcohol)	0.332
Fatty matter	3.601
Salts, alkaline chlorid, sulphate and carbonate	0.710
Total	100.000

**Report—Mild Weather.**—W. Addenbrooke, North Prairie, Wis., on Dec. 4, 1885, writes:

I started last spring with 83 colonies of pure and hybrid-Italians, and increased them, by natural swarming, to 160 colonies. I did not accept any after-swarms. My surplus honey crop amounts to 2,300 pounds of white clover honey in 1½-pound sections, and 1,200 pounds of extracted honey. It was a poor season, too, being wet and cold. I have now 140 colonies all ready for the cellar, but we are having very mild weather. Last year, bees were taken into the cellar on Nov. 20. I wintered 130 colonies last winter, and only lost 3.

**Good Report.**—H. M. Cates, Shideler, Ind., on Nov. 23, 1885, says:

In the winter of 1883-84 I lost all of my bees excepting 4 colonies. I am through with wintering bees outdoors, when it can be avoided. The fall of 1884 found me with 25 nice colonies of bees, and after the winter was over I had only 5 colonies to commence the past season with, which I have increased to 15 colonies. I worked them for comb honey, and obtained 350 pounds of the nicest honey I ever saw—so nice that by taking some 85 pounds of it to the Delaware County Fair, I secured the first premium, much to the surprise of some older bee-men who had heretofore captured it. I have sold about 300 pounds of my honey at 20 and 25 cents per pound—the most of it being sold for 25 cents per pound—and I

have had many calls for honey since I sold all I had for sale. I must tender my thanks to the BEE JOURNAL, for from its pages I learned all that I know about keeping bees.

**Bees in Winter Quarters.**—E. T. Jordan, Harmony, Ind., on Dec. 4, 1885, writes:

Last spring I began with 6 colonies, sold one, and bought 8 colonies of black bees in box-hives, which I transferred to the Langstroth hive and Italianized. I secured 250 pounds of comb and extracted honey, and increased my apiary to 42 colonies, by division. They were fed one barrel of sugar syrup in the fall, and the hives packed on the sides and top with chaff cushions. I put them into the bee-room on Nov. 27. It is a double-walled room filled in with 8 inches of sawdust. The mercury has not been below 43° in it yet.

#### Convention Notices.

The annual Convention of the Indiana State Bee-Keepers' Society will be held at Indianapolis, Ind., on Jan. 20 and 21, 1886. The meetings of this Society have been very successful in the past, and the coming meeting promises to be still better. The meeting will be held in the rooms of the State Board of Agriculture, and it is one of a series of meetings held by the different Societies of the State, which pertain to the specialties of Agriculture, viz., Dairying, Wool-Growing, Swine-Breeding, Poultry-Raising, etc. Reduced rates are offered at Hotels, and everything possible will be done to make the meeting entertaining and instructive. A very complete program is being prepared, with ample time to discuss the important subjects of particular interest to bee-keepers. A cordial invitation is extended to all bee-keepers, with the hope that they will attend, and thus make the Convention of still greater importance.

FRANK L. DOUGHERTY, Sec.

The annual meeting of the Cortland Union Bee-Keepers' Association will be held in Union Hall at Cortland, N. Y., on Jan. 12, 1886, at 10 a.m. It is hoped that all interested in apiculture will make an extra effort to be in attendance at this meeting. Those unable to attend this meeting are requested to send to the Secretary, reports of their apiaries from May 1, 1885, to Dec. 1, 1885.

W. H. BEACH, Sec., Cortland, N. Y.

The annual meeting of the Northwestern Illinois and Southwestern Wisconsin Bee-Keepers' Association will be held in Freeport, Ills., on Tuesday, Jan. 19, 1886.

JONATHAN STEWART, Sec.

The annual meeting of the Champlain Valley Bee-Keepers' Association will be held in Middlebury, Vt., on Jan. 21, 1886.

R. H. HOLMES, Sec.

The next meeting of the Maine Bee-Keepers' Association will be held at Skowhegan, Me., on Jan. 19, 20 and 21, 1886. The Maine Central R. R. will sell tickets at one fare for the round trip. The Grand Trunk R. R. will sell tickets at the same rate to Lewiston, Me., to all who attend the meeting. Bee-keepers everywhere are cordially invited to be present.

WM. HOYT, Sec.

**Are you Entitled** to a pension? You may be and may not know it. If you examine the Guide and Hand-Book you will soon find out. Thousands of things worth knowing will be found in it. The BEE JOURNAL for 1886 and the Guide Book will both be sent for \$1.30.

#### OUR CLUBBING LIST for 1886.

We supply the **American Bee Journal** for 1886, and any of the following publications, at the prices quoted in the last column of figures. The first column gives the regular price of both. All postage prepaid.

	Price of both. Club
The American Bee Journal .....	1 00..
and Gleanings in Bee-Culture .....	2 00.. 1 75
Bee-Keepers' Magazine .....	2 00.. 1 75
Bee-Keepers' Guide .....	1 50.. 1 40
The Apiculturist .....	2 00.. 1 75
Canadian Bee Journal .....	2 00.. 1 75
Texas Bee Journal .....	2 00.. 1 75
The 7 above-named papers .....	6 50.. 5 50
and City and Country .....	2 00.. 1 50
New York Independent .....	4 00.. 3 30
American Agriculturist .....	2 50.. 2 25
American Poultry Journal .....	2 25.. 1 75
and Cook's Manual .....	2 25.. 2 00
Bees and Honey (Newman) .....	2 00.. 1 75
Binder for Am. Bee Journal .....	1 75.. 1 60
Apilary Register—100 colonies .....	2 25.. 2 00
Dzierzon's Bee-Book (cloth) .....	3 00.. 2 00
Dzierzon's Bee-Book (paper) .....	2 50.. 2 00
Quinby's New Bee-Keeping .....	2 50.. 2 25
Langstroth's Standard Work .....	3 00.. 2 75
Root's A B C of Bee-Culture .....	2 25.. 2 10
Alley's Queen-Rearing .....	2 50.. 2 25
Farmer's Account Book .....	4 00.. 3 00
Guide and Hand-Book .....	1 50.. 1 30

#### Honey as Food and Medicine.

To create Honey Markets in every village, town and city, wide-awake honey producers should get the Leaflets "Why Eat Honey" (only 50 cents per 100), or else the pamphlets on "Honey as Food and Medicine," and scatter them plentifully, and the result will be a DEMAND for all of their crops at remunerative prices. "Honey as Food and Medicine" are sold at the following prices:

Single copy, 5 cts.; per doz., 40 cts.; per hundred, \$2.50. Five hundred will be sent postpaid for \$10.00; or 1,000 for \$15.00. On orders of 100 or more, we will print, if desired, on the cover-page, "Presented by," etc. (giving the name and address of the bee-keeper who scatters them).

To give away a copy of "Honey as Food and Medicine" to every one who buys a package of honey, will sell almost any quantity of it.

#### System and Success.

All who intend to be systematic in their work in the apairy, should get a copy of the Apilary Register and commence to use it. The prices are as follows:

For 50 colonies (120 pages) .....	\$1 00
" 100 colonies (220 pages) .....	1 25
" 200 colonies (420 pages) .....	1 50

The larger ones can be used for a few colonies, give room for an increase of numbers and still keep the record all together in one book, and are therefore the most desirable.

**The Guide and Hand-Book**, is a book of ready reference and an encyclopaedia of everything desirable to know. As a guide to the home-seeker, it is invaluable. Its contents are partially given on page 800, and will convince any one of its value. We do not think any of our readers can afford to do without it. As a book of ready reference we find it of great value in our library. We will send the Weekly BEE JOURNAL for a year and the Guide for \$1.30.

Any person not a subscriber, receiving a copy of this paper, will please consider it an invitation to become a subscriber to it.

**WEEKLY EDITION**  
OF THE  
**AMERICAN**  
  
**BEE JOURNAL**

PUBLISHED BY  
**THOMAS G. NEWMAN & SON,**  
PROPRIETORS,  
923 & 925 WEST MADISON ST., CHICAGO, ILL.

**ALFRED H. NEWMAN,**  
BUSINESS MANAGER.

## Special Notices.

**SPECIAL NOTICE.**—On January 1, 1886, the price of the Weekly BEE JOURNAL will be reduced to *One Dollar a Year*. This we have contemplated for some years, and only awaited the proper time to warrant us in issuing the Weekly BEE JOURNAL at the very low price of *one dollar a year*. That time has now come. We shall continue to improve the BEE JOURNAL, and it will maintain its proud position as the leading bee-paper of the World!

“**Don’t Stop**”—that is what many write to us about their papers, when their time is nearly out. One subscriber says: “This has been a year of disaster, and it is not convenient for me to send you the money now to renew my subscription. It runs out with this month; *but don’t stop sending it*. I will get the money to you within three months.” Such letters are coming every day, and so for the present we have concluded not to stop any papers until requested to do so.

**Comb Honey Wanted.**—We have an opportunity to sell several thousand pounds more of Choice White Comb Honey in 1-lb. sections—on commission. Those who have such for sale are invited to correspond with us—stating particulars, including the price desired.

**The Western World Guide** and Handbook of Useful Information, contains the greatest amount of useful information ever put together in such a cheap form. The printing, paper, and binding are excellent, and the book is well worth a dollar. To any one sending us two new subscribers besides their own, with \$3, for one year, we will present a copy of this valuable book.

**Sample Copies** of the BEE JOURNAL will be sent **FREE** upon application. Any one intending to get up a club can have sample copies sent to the persons they desire to interview by sending the names to this office, or we will send them all to the agent.

### Honey and Beeswax Market.

Office of the AMERICAN BEE JOURNAL.  
Monday, 10 a.m., Dec. 14, 1885.

The following are the latest quotations for honey and beeswax received up to this hour:

#### CHICAGO.

HONEY.—The market is without special change since last quotations. White comb honey in one-pound sections brings 15@16c. A little fancy sells at 17c. in a small way. Dark comb honey sells slowly. Nearly all of the white comb honey comes from the East. Extracted is held firmly at from 6@8c. BEESWAX.—25c.

R. A. BURNETT, 161 South Water St.

#### BOSTON.

HONEY.—It is selling very well but prices are very low, and we are often obliged to shade our prices in order to make rates. We quote comb honey in 1-lb. sections at 14@16c., and 2-lb. sections at 12@14c. Extracted, 6@8c.

BEESWAX.—30 cts. per lb.

BLAKE & KIRLEY, 57 Chatham Street.

#### NEW YORK.

HONEY.—The market for comb honey is quite active, and the demand nearly equal to the supply. Prices are gradually shading, owing to the fact of many producers selling the entire crop in this city at very low prices, thereby enabling the purchasers to sell low and realize a handsome profit. Large lots have been sold here at 9@10c. for fancy goods. In consequence of no honey coming in from the West, we can see no reason why good prices should not be obtained, except as above stated. Present quotations are: Fancy white 1-lb. sections, 14@15c.; the same in 2-lb. sections, 11@12c.; 2-lbs., 9@10c. Off grades 1 to 2c. less. BEESWAX.—Prime yellow, 25@28c.

MCCAUL & HILDRETH BROS., 34 Hudson St.

#### CINCINNATI.

HONEY.—There is a very slow demand from manufacturers, for extracted honey, with a large supply on the market, while the demand is very good for clover honey in square glass jars. Prices for all qualities are low and range from 4@8c. a lb. Supply and demand is fair for choice comb honey in small sections, which brings 12@15c. per lb.

BEESWAX.—Good yellow is in good demand, and arrivals are fair, at 20@22c. per lb.

C. F. MUTH, Freeman & Central Ave.

#### SAN FRANCISCO.

HONEY.—Choice comb honey is in light supply and is bringing firm figures. There is a fair movement in best qualities of extracted at steady rates. We quote as follows: White to extra white comb, 10@12c.; amber, 7@8c. Extracted, white, liquid, 5@6c.; light amber colored, 4@4@5c.; amber and candied, 4@4c.; dark and candied, 4@4c.

BEESWAX.—Quotable at 23@25c. wholesale.

O. B. SMITH & Co., 423 Front Street.

#### CLEVELAND.

HONEY.—The market since our last report has improved very much and there is a good opening for very choice white 1-lb. sections, for which 14@15c. is obtained. Our stock of new is very light at present but of the old we have a good supply which we sell at 10@13c. for white 1-lb. sections. Extracted honey is slow at 6@7c. for best white clover and basswood.

BEESWAX.—Very scarce at 20@22c.

A. C. KENDEL, 115 Ontario Street.

#### KANSAS CITY.

HONEY.—The demand for honey begins to sag under the present comparatively high prices, and recent warm weather, though choice 1-lb. sections are still scarce and pretty well taken up at 16@17c. We think, however, that the top is reached and any change will be lower prices. Two-lb. sections are selling at 12@15c. Extracted, dark, 4@6 cts.; white, 7@8c.

BEESWAX.—22@25c.

CLEMONS, CLOON & Co., cor. 4th & Walnut.

**To Correspondents.**—It would save us much trouble, if all would be particular to give their P. O. address and name, when writing to this office. We have several letters (some inclosing money) that have no name; many others having no Post-Office, County or State. Also, if you live near one post-office and get your mail at another, be sure to give the address we have on our list.

**A few Binders** for the Monthly (two columns on a page) are left. We will mail them for **30 cents** each, to close them out. They are not large enough for either the Weekly or the Monthly of the present size—three columns on a page.

**Beeswax Wanted.**—We are now paying 23 cents per pound for good, average, yellow Beeswax, delivered here. Cash on arrival. Shipments are solicited. The name of the shipper should be put on every package to prevent mistakes.

Agents can sell the Guide and Hand-Book like “hot-cakes.” Send us an order for five copies (with \$2.50) and we will send you the Weekly BEE JOURNAL free for a year. This is a rare opportunity to get the Weekly BEE JOURNAL without cost!!

## Advertisements.

## HONEY

We are now in the market, and will be during the entire season, for all honey offered us, in any quantity, shape, or condition—just so it is pure. We will sell on commission, charging 5 per cent.; or, if a sample is sent us, we will make the best cash offer the general market will afford. We will handle beeswax the same way, and can furnish bee-men in quantities, crude or refined, at lowest market prices. Mr. Jerome Twichell, our junior member in this department, has full charge, which insures prompt and careful attention in all its details.

Sample of comb honey must be a full case, representing a fair average of the lot. On such sample we will make prompt returns, whether we buy or not.

CLEMONS, CLOON & CO.,  
36A17  
KANSAS CITY, MO.

## NEW ONE-POUND HONEY PAIL.

THIS new size of our Tapering Honey Pails is of uniform design with the other sizes, having the top edge turned over, and has a bail or handle,—making it very convenient to carry. It is well-made and, when filled with honey, makes a novel and attractive small package, that can be sold for 20 cents or less. Many consumers will buy it in order to give the children a handsome toy pail. **PRICE, 75 cents per dozen, or \$5.00 per 100.**

THOS. G. NEWMAN & SON,  
923 & 925 West Madison Street, CHICAGO, ILL.

**\$200,000**

in presents given away. Send us 5 cents postage, and by mail you will get free a package of goods of large value that will start you in work that will at once bring you in money faster than anything else in America. All about the \$200,000 in presents with each box. Agents wanted everywhere, of either sex, of all ages, for all the time, or spare time only, to work for us at their own homes. Fortunes for all workers absolutely assured. Don’t delay. H. HALLETT & CO.,  
1A17  
Portland, Maine.

### Bee-Keepers’ Badges at Fairs.

We have some ELEGANT RIBBON BADGES, having a rosette and gold Bee, for bee-keepers’ use at Fairs, Conventions, etc. Price 50 cents each, by mail, postpaid.

THOMAS G. NEWMAN & SON,  
923 & 925 West Madison St., CHICAGO, ILL.

Use the boss Zinc and Leather Interfering Boots and Collar Pads. They are the best. 45D6

## HEADQUARTERS IN THE SOUTH

For the manufacture of  
**Bee-Keepers Supplies**

Dunham and Root Foundation a specialty. Italian Queens and Bees from March to November.

Send for my Illustrated Catalogue.

5Ct. PAUL L. VIALLON, Bayou Goula, La.

# HONEY FOR SALE!

Well-ripened, bright BASSWOOD extracted HONEY, at the following low price, for CASH with the order :

100 Pound Kegs (net) each..... \$8 00  
50 " " " " 4 00

Free on board CARS, and no charge for kegs. Shipments prompt.

I also have on hand several thousand pounds of mixed honey, of about equal parts of basswood and fall flowers, which may be called AMBER HONEY, that I will sell as above, at 1 cent less per pound.

Address, **JAMES HEDDON,**  
DOWAGIAC, Cass County, MICH.

## AMERICAN INVENTOR, A JOURNAL FOR

The Inventor, Mechanic and Manufacturer.  
**SUBSCRIPTION, \$1 PER YEAR.**

Each number is replete with articles on Patent Law, Invention, Mechanics, Art, Science, Manufactures, etc.

Agents wanted : liberal pay ; write for terms.  
**Best Advertising Medium of its class.**  
Send for sample copy and advertising rates.

Address, **AMERICAN INVENTOR,**  
188 West Fifth St., CINCINNATI, O.

Dadant's Foundation Factory, wholesale and retail. See Advertisement in another column.

## FLAT - BOTTOM COMB FOUNDATION.



high side-walls, 4 to 16 square feet to the pound. Circular and samples free.

J. VAN DEUSEN & SONS,  
Sole Manufacturers,  
Sprout Brook, Mont. Co., N. Y.

## PATENTS

CAVEATS, TRADE MARKS, LABELS and COPY-RIGHTS promptly secured for United States and Foreign Countries. Patents Negotiated. **INVENTOR'S MANUAL**, a 70-page book, showing How to Procure and Sell Patents, sent free. All Patents procured through this Agency described in the **AMERICAN INVENTOR**. AMERICAN PATENT AGENCY, 188 & 190 W. Fifth St., Cincinnati, Ohio.

**WIN** more money than at anything else by taking an agency for the best selling book out. Beginners succeed grandly. None fail. Terms free. HALLETT BOOK CO., Portland, Maine.

Dadant's Foundation Factory, wholesale and retail. See Advertisement in another column.

## ELECTROTYPE

Of Engravings used in the Bee Journal for sale at 25 cents per square inch—no single cut sold for less than 50c.

**THOS. G. NEWMAN & SON,**  
923 & 925 West Madison St., CHICAGO, ILL.

Dadant's Foundation Factory, wholesale and retail. See Advertisement in another column.

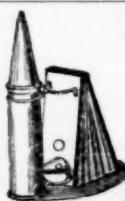
**EVERY MAN** who desires to become his own Printer at a remarkably low original cost, can do so by getting our circular tree. New plan; just what firms need.

**L. ZERBE**, 188 W. 5th St., Cincinnati, O.

## THE BRITISH BEE JOURNAL AND BEE-KEEPER'S ADVISER.

The BRITISH BEE JOURNAL is published every Week, at Ten Shillings and 10d. per annum, and contains the best practical information for the time being, showing what to do, and when and how to do it. It is edited by T. W. Cowan, Esq.

The British Bee Journal and our Weekly for \$3.50.



### Bee-keepers' Supplies,

Standard Langstroth,

### Quinby Standing-Frame,

And all other kinds of **Hives**,  
MADE TO ORDER,

### Quinby Smoker a specialty.

I shall supply anything you need in the Apiary. Send for Illustrated Price List.

W. E. CLARK, successor to L. C. Root,  
7A1Y ORISKANY, Oneida County, N. Y.

## New Saw for Hive-Making.

Learning that the Barnes' Saw has been much improved for next season's operations, we sent to them for a description, so that those who intend to make their own hives might see a cut of it and learn what its improvements consist in. Here is what the manufacturers say of it:

The new Machine is the result of many years' experience and thought in this direction. The old Combined Machine, on the whole, gave good satisfaction to bee-keepers. There were, however, some weak points about the Machine which we desired to eradicate, and we believe that in the new Machine we have surmounted the difficulties. It is stronger and stiffer in every way than was the old Machine, and is capable of a larger range of work.



## THE INVERTIBLE HIVE! INVERTIBLE FRAMES,

Invertible Surplus Honey Cases,  
Entrance Feeders, Top and Bottom Feeders,  
Hive-Lifting Device, Honey Extractors,  
Wax Extractors, Comb Foundation, etc.

Catalogue is now ready, and will be mailed  
to all who may apply for it.  
J. M. SHUICK,  
DES MOINES, IOWA.

10A1Y

## Muth's Honey Extractor,

Square Glass Honey Jars, Tin Buckets,  
Langstroth Bee-Hives, Honey-Sections, etc.

Apply to **CHAS. F. MUTH**,  
Freeman & Central Ave., CINCINNATI, O.

Send 10c. for Practical Hints to Bee-Keepers.

## Wooden Pails for Honey!

We can furnish regular Wooden Water-Pails—well painted on the outside, and with 3 iron hoops and a tight-fitting wood cover, at \$2.25 per dozen. They will hold 25 lbs. of honey, and when empty, can be utilized for use as an ordinary household pail.

**THOS. G. NEWMAN & SON**,  
923 & 925 West Madison Street, CHICAGO, ILL.

One of the strongest points of the new Machine is in the matter of the Belt. The belting arrangement is such that friction is reduced to the minimum, and at the same time there is absolutely no chance of the Belt slipping. All will therefore readily perceive that this feature makes the Machine capable of a great deal of work at the least possible expenditure of physical power and exertion.

The Machine embraces, as heretofore, Scroll and Circular Saw, although either of these can be taken independent of the other, if desired.

These Machines are sold on the same terms and at the same price as before the improvements were made, viz.: \$35.00 for Circular Saw including 1 rip and 1 cross-cut saw. Catalogue free. For sale by

**THOS. G. NEWMAN & SON**,  
923 & 925 West Madison St., CHICAGO, ILL.

**HELP** for working people. Send 10 cents postage, and we will mail you free, a very valuable sample box of goods that will put you in the way of making more money in a few days than you ever thought possible at any business. Capital not required. You can live at home and work in spare time only, or all the time. All of both sexes, of all ages, grandly successful. 50 cents to \$5 easily earned every evening. That all who want work may test the business, we make this unparalleled offer: To all who are not well satisfied we will send \$1 to pay for the trouble of writing us. Full particulars, directions, etc., sent free. Immense pay absolutely sure for all who start at once. Don't delay. Address STINSON & CO., 51A1Y Portland, Maine.